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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,510	02/07/2002	Peter Ottersbach	215548US0XPCT	6845
22850	7590	03/25/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			FUBARA, BLESSING M	
			ART UNIT	PAPER NUMBER
			1615	

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/926,510	OTTERSBACH ET AL.	
	Examiner	Art Unit	
	Blessing M. Fubara	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner acknowledges receipt of amendment to the specification and claims filed 01/05/04; IDS filed 11/20/03 and 01/06/04. Claims 1-7 and 12-16 are pending.

The IDS filed 11/20/03 has no references filed with the cover sheet. Applicants may resubmit any references intended for submission with the cover sheet.

Claim Rejections - 35 USC § 112

1. The rejection of claim 16 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn because amendment to said claim overcomes the rejection.

Claim Rejections - 35 USC § 102

2. Claims 1, 3-5 and 12-16 remain rejected under 35 U.S.C. 102(b) as being anticipated by Pardini (EP 0 204 312).

3. Applicants argue that Pardini does not anticipate the claims because:

- a) the amines in Pardini are protonated
- b) while DMAM and DEAM are monomers having tertiary amino groups, the fact is that the amines of Pardini are protonated
- c) Pardini exclusively discloses antimicrobial polymers comprising protonated amines
- d) the invention is directed to antimicrobial polymers comprising monomers with tertiary amino groups and not ammonium salts of tertiary amino groups
- e) an essential step in Pardini is to treat the amino functionalized monomer with an acid; this step is not disclosed in the instant invention
- f) therefore, the process of the instant invention is “totally” different from Pardini

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g) functionalized substances are chemically distinct from ammonium salts

h) as shown in examples in the specification, amino groups that are not converted into ammonium groups possess antimicrobial properties

i) Pardini reveals that protonated amine is essential for the antimicrobial properties of the polymers

4. Applicants' arguments filed 01/05/04 have been fully considered but they are not persuasive.

On count a), it is noted that the amines of Pardini are tertiary amines, which is also acknowledged by the applicants. The disclosure that the amines are protonated does not take away from the fact that Pardini's amines are tertiary amines (see Table 1 and claim 4 of Pardini). Tertiary amines have the ability of becoming protonated.

On count b), Examiner agrees with applicants that DMAM and DEAM are tertiary amino monomers and by the nature of tertiary amine, can be protonated and does not take away from the fact that these monomers have tertiary amine groups.

On count c), the antimicrobial polymers of Pardini are tertiary amine monomers that are protonated, the monomers have tertiary amino groups.

On count d), the monomers of Pardini are protonated tertiary amines and they are not ammonium salts of the tertiary amino groups.

On count e), the step of treating the amino functionalized monomer with acid is neither disclosed nor excluded from the steps of the instant invention; the instant process comprises

On count f), the process of the instant invention does not differ from the process of the prior art in the broadest interpretation of a broad claim.

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On count g), the protonated amine monomers are not ammonium salts of the tertiary amine monomers, if it were, the amine monomers would be ammonium salt of the amine monomers, and it is not immediately apparent how that would be.

On count h), the protonated amino monomers are not ammonium salts and the antimicrobial activity of the protonated amine monomers is not necessarily all due from the protonation of the tertiary nitrogen.

On count i), the instant claims do not exclude tertiary amino monomers that are protonated.

Claim Rejections - 35 USC § 103

5. Claims 6 and 7 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Pardini (EP 0 204 312).

Applicants' position regarding this rejection is a withdrawal of the rejection in light of the reasons given above. This position is not persuasive because, protonated amine monomer is not ammonium salt of the amine monomer. The instant claim does not exclude protonation of the tertiary amino monomer.

Double Patenting

Examiner thanks applicants for their willingness to address the issue under the judicially created doctrine of double patenting when an allowable subject matter is identified. All the same the rejection is maintained and the rejection is reiterated below:

Claims 1, 2, 5-7 and 12-15 remain rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 7-11 and 14-16 of U.S. Patent No. 5,967,714. Although the conflicting claims are not identical, they are not patentably distinct from each other because the issued patent treats surfaces/articles/substrates with anti-

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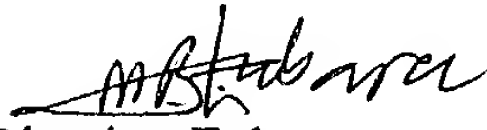
microbial composition that anticipates the composition of the instant invention. Tert-butylaminoethyl methacrylate anticipates the formula of instant claim 2. The microbial polymer prepared by the process of instant claim 1 is comprised in the articles of instant claims 13-15.

Claims 1, 2, 4, 5, 14 and 15 remain rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,096,800. Although the conflicting claims are not identical, they are not patentably distinct from each other because the teachings of the issued patent encompass the claimed invention

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 242-0594. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Blessing Fubara
Patent Examiner
Tech. Center 1600